



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: LA GRECA, Gaetano

SERIAL NO.: 10/511,524

ART UNIT: 3727

FILED: March 21, 2005

EXAMINER: Mai, T.M.

TITLE: BACKPACK ATTACHMENT FOR IMPROVED DISTRIBUTION OF THE
BACKPACK WEIGHT ACROSS A USER'S SHOULDERS

Amendment A: SPECIFICATION AMENDMENTS

On page 5, paragraph [0025], revise the paragraph as follows:

In a first embodiment of the inventive attachment, shown in ~~Figures 1 and 3~~
Figure 1, a pair of substantially inflexible curved members 1 are formed of one piece each.

On page 5, paragraph [0026], revise the paragraph as follows:

In the embodiment of Figure 1, the members 1 comprise hollow curved pieces 2 of wood, metal, or plastics, which are adapted to be slipped over each shoulder straps T of a commercially available backpack, as shown in Figure 8 9, to contact the top rear wall of the bag-like body S CS of the backpack Z. The underside of the hollow pieces 2 is lined with a soft yielding material 3 for more comfortable contact with the user's shoulder.

On page 6, paragraph [0027], revise the paragraph as follows:

In the embodiment of Figure 3, the curved ~~members 1~~ member 1A again comprise curved pieces 2A of wood, metal, or plastics, but need not be of hollow construction. These pieces are hinge-connected to holders 4 that can be secured in areas where the shoulder straps are usually hung. This design is especially suitable for the manufacture of new backpacks, whereas it is not adapted for modifying according to the invention those backpacks which have already been manufactured. It requires, in fact, that the affected areas of the bag-like body wall be provided, by means of any appropriate mechanical means, with holders 4, in order for them to get stiffened. The stiffening effect can be obtained in any of several ways, e. g. by providing additional metal or plastics plates or by providing the bag-like body CS of the backpack Z with a rigid or semirigid material wall to which the shoulder straps T can be connected. The shoulder straps are made fast here to the end of the piece 2A away from the holder 4. The angled set of the pieces 2A relative to the holders 4 can be adjusted and maintained by a device, not shown, in order to tailor the backpack attachment to fit a user's anatomy.

On page 6, paragraph [0028], revise the paragraph as follows:

In a second embodiment of the backpack attachment of this invention, shown in Figures 2, 4 and 5, a pair of substantially inflexible curved members $\pm 1B$ are used which comprise several pieces jointed to one another. These members $\pm 1B$ may comprise hollow pieces 5 adapted to be slipped over the shoulder straps of the backpack as shown in Figure 2 9.

On page 6, paragraph [0029], revise the paragraph as follows:

Alternatively, as shown in ~~Figure 4~~ Figures 4 and 5, the leading one 7 of the hinge-connected pieces 6 in each member $\pm 1C$ is affixed to a stiffened area at the top of the bag-like body CS of the backpack Z, with the shoulder strap fastened to the trailing one 8 of said pieces 6. In a slight modification shown in Figure 5, the leading one 9 of said hinge-connected pieces 6 in each member 1 is provided much longer than the others for more secure connection to the wall of the bag-like body CS of the backpack Z, and the shoulder strap 10 extends from the leading piece 9 through all the others 6, it being connected to such pieces in a suitable manner to produce the curved pattern of the member $\pm 1C$ shown in Figure 5.

On page 7, paragraph [0030], revise the paragraph as follows:

In a third embodiment, which may be regarded as a presently preferred modification of the second, the invention is embodied most effectively by the backpack attachment having (Figures 6 to 8) two members $\pm 1D$, each comprised of several stiff shaped pieces 11 of relatively small thickness adapted to be associated with the backpack shoulder straps in a detachable fashion. Some of the pieces 11 are loosely associated with a respective one of the shoulder straps (not shown in Figures 6 to 8) by releasable hoops formed by a pair of strips 12 which are ~~Velcro~~ VELCRO (TM) tipped at 13 to engage with each other over the shoulder strap. At least one piece 14 of these pieces should incorporate a releasable locking device. Figure 6 shows this locking device as comprised of an L-shaped camming lever 15 pivoted about a pin 16 in side retainers 17 of open construction.

On page 7, paragraph [0031], revise the paragraph as follows:

Once the shoulder strap is threaded through the piece 14 and under the camming lever 15, the camming lever can be operated between a position where the member $\pm 1D$ is allowed to run along the shoulder strap and a position where the member $\pm 1D$ is cammed down against the shoulder strap, a suitable distance away from the bag-like body CS of the backpack Z to fit the user's anatomy. The pieces 11, 14 of these members $\pm 1D$ have their undersides lined with a soft yielding material 18 for more comfortable contact with the user's body (as basically favored by the shape of the pieces 11).

On page 7, paragraph [0031], revise the paragraph as follows:

Preferably, in the embodiment just described, a positive engagement means (Figures 7 and 8) is arranged on the individual hinge-connected pieces for locking them in selected mutually angled positions, thereby to further a close fit of the attachment to a user's anatomy and orientation meet a user's preference. To set the hinge-connected pieces ~~11 and orientation 14~~ 11a to a desired included angle, locking devices are provided on one side of said pieces, according to the preferred embodiment of Figure 7, which devices comprise a small gear wheel 19 and a slider 20. The gear wheel 19 locates next to one end of the side of the piece, ~~11 and orientation 14~~ 11a, and the slider 20 is moved along this side. The slider 20 is formed at one end with a jaw 21 for engagement with teeth of the gear wheel 19 on the adjacent piece, ~~11 or 14~~ 11a, and is biased away from the latter by a spring ~~11 22~~ mounted on the other end of the slider. After a desired included angle between two pieces ~~11 and orientation 14~~ 11a is found, the slider 20 of one piece is shifted against the bias of the spring ~~14 22~~ to engage the gear wheel 19 on the other piece, thereby locking both pieces together in their set positions. To maintain an angled relationship between the two pieces ~~11 and orientation 14~~ 11a, the slider 20 is locked in the engaged position with the wheel 19 by driving a knurled end 25 of a tapered pin 23 through a mating hole in the slider 20. To change a setting, the pin 23 is released and the spring 22 allowed to urge the slider 20 out of engagement by its jaw 21 with the gear wheel 19. A retainer 26 has a shank slidable along a slot 27 to hold the slider 20 close against the side of the piece ~~11~~ 11a.